

**I CLAIM AS MY INVENTION:**

1. A medical system architecture comprising:
  - a plurality of modalities for acquiring examination images;
  - a plurality of computer workstations respectively allocated to the modalities for processing the respective examination images therefrom;
  - a transmission device connected to said computer workstations for transmitting said examination images to a location remote from said computer workstations;
  - a memory connected to said transmission device for storing said examination images;
  - a further computer workstation connected to said transmission device for post-processing said examination images;
  - each of said computer workstations and said further computer workstation containing a work list management unit in which a work list is stored and which has a detector that determines usage of that computer workstation dependent on the stored work list;
  - and
  - a task generator in communication via said transmission device with the respective work list management units of the computer workstations and the further computer workstation, said task generator including an evaluation device which reacts to the respective received signals from said computer workstations and

said further computer workstation to manage usage of the computer workstations and the further computer workstation.

2. A medical system architecture as claimed in claim 1 wherein said detector comprises a threshold detector that compares a number of still pending cases in said work list to an input value, and which generates a request signal and transmits it to said task generator when a work load at that computer workstation falls below a request threshold represented by said input value.

3. A medical system architecture as claimed in claim 1 wherein each detector comprises a threshold comparator that compares a number of still pending diagnostic cases in said work list to an input value and which generates a saturation signal and transmits said saturation signal to said task generator when a work load at that computer workstation with diagnostic cases to be processed exceeds a saturation threshold represented by said input value.

4. A medical system architecture as claimed in claim 1 wherein each of said computer workstation contains a task generator.

5. A medical system architecture as claimed in claim 1 further comprising a server with a routing device connected to said task generator, said server forwarding said diagnostic cases to respective workstations among said

computer workstations and said further computer workstation dependent on the respective signals received by said task generator.

6. A method for controlling usage of a computer workstation, comprising the steps of:

processing a work load of diagnostic cases at a computer workstation dependent on a work list;

if a work load of said diagnostic cases at said computer workstation falls below a request threshold, communicating a request signal to a task generator located remote from said computer workstation;

if said work load of said computer workstation exceeds a saturation threshold, communicating a saturation signal to said task generator;

when said task generator receives said request signal, transmitting further diagnostic cases to be processed to said computer workstation; and

when said task generator receives said saturation signal, inhibiting transmission of further diagnostic cases to be processed to said computer workstation.